FIGURE 1

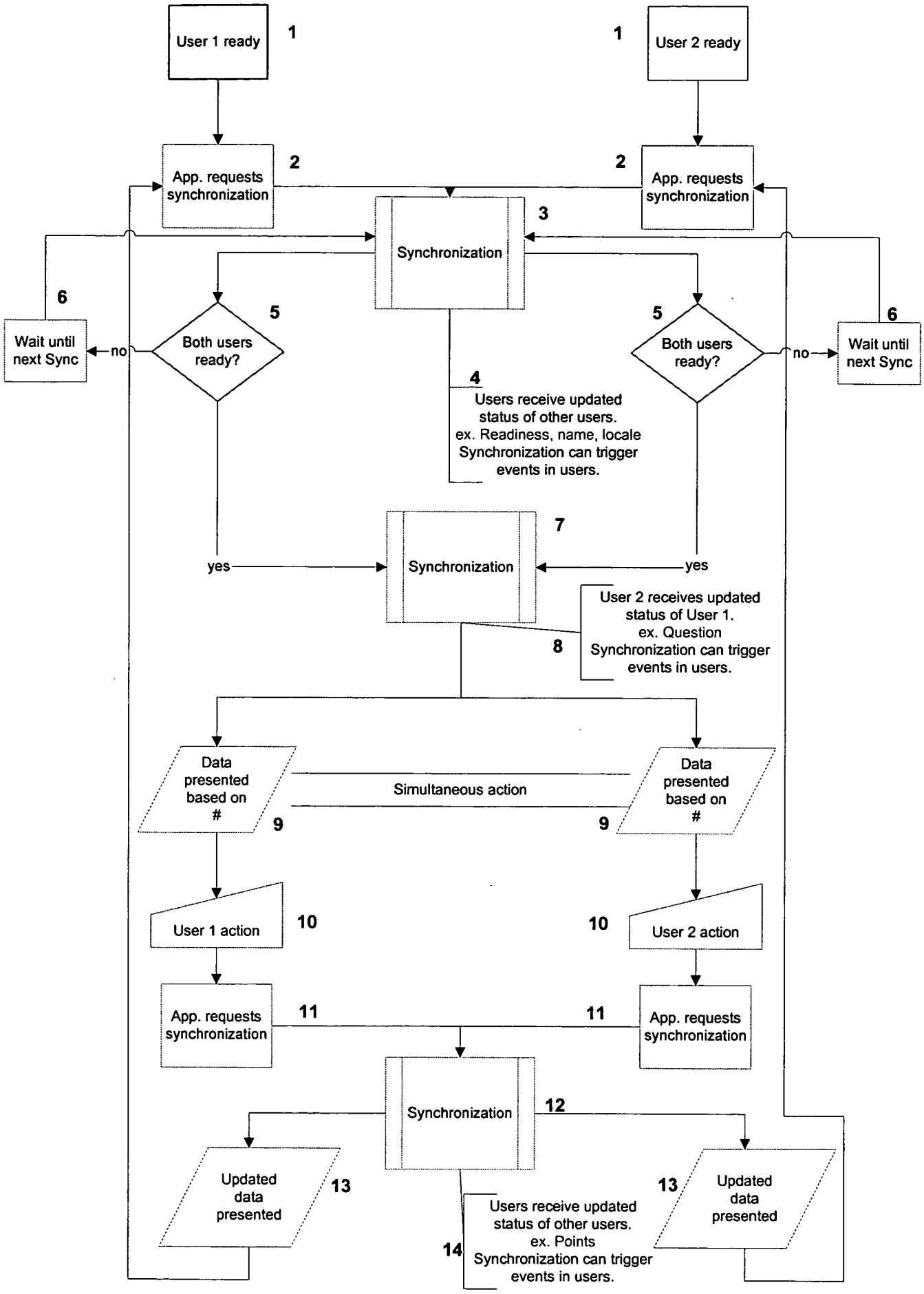

User 1 ready
1
User 2 ready
1
App. requests synchronization
2
App. requests synchronization
2
Synchronization
3
Wait until next Sync
6
no
Both users ready?
5
Both users ready?
5
no
Wait until next Sync
6
4
Users receive updated status of other users.
ex. Readiness, name, locale
Synchronization can trigger events in users.
Synchronization
7
yes
yes
User 2 receives updated status of User 1.
ex. Question
Synchronization can trigger events in users.
8
Data presented based on #
9
Simultaneous action
Data presented based on #
9
User 1 action
10
10
User 2 action
App. requests synchronization
11
11
App. requests synchronization
Synchronization
12
Updated data presented
13
13
Updated data presented
Users receive updated status of other users.
ex. Points
Synchronization can trigger events in users.
14

FIGURE 2

Synchronization Process

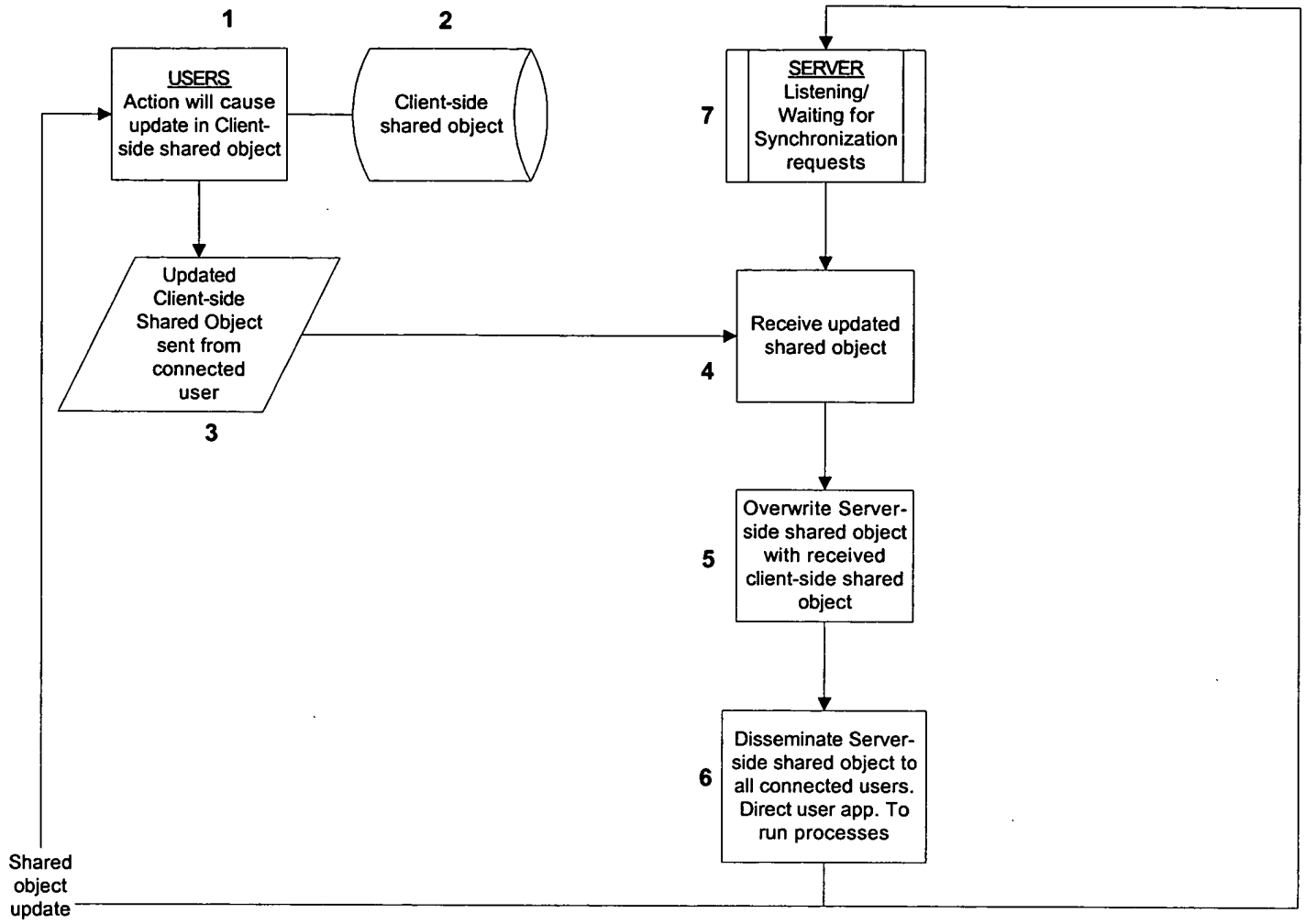


FIGURE 3

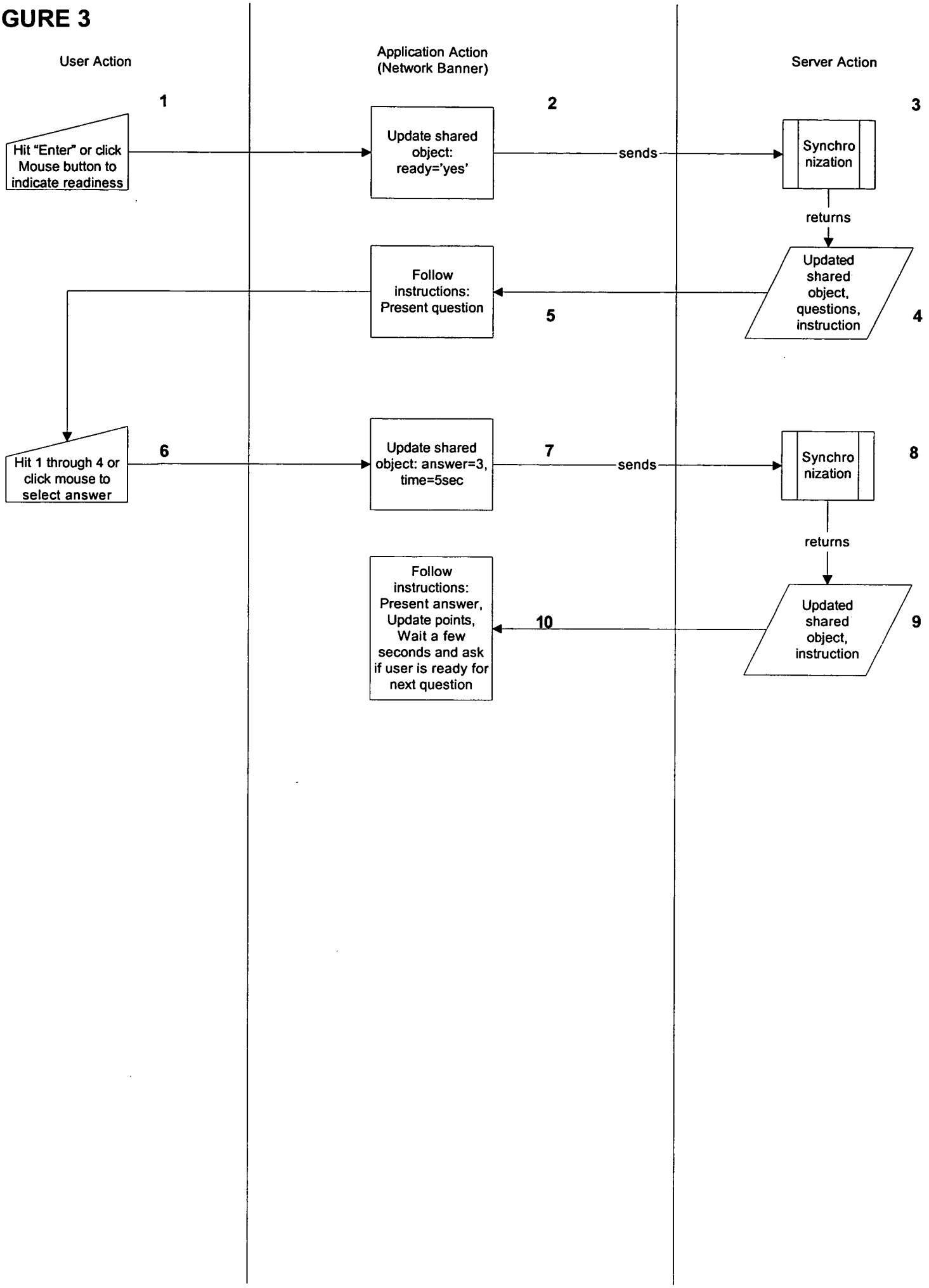

User Action
Application Action (Network Banner)
Server Action
1
2
3
Hit "Enter" or click Mouse button to indicate readiness
Update shared object: ready='yes'
sends
Synchro nization
returns
Updated shared object, questions, instruction
4
Follow instructions: Present question
5
Hit 1 through 4 or click mouse to select answer
6
Update shared object: answer=3, time=5sec
7
sends
Synchro nization
8
returns
Updated shared object, instruction
9
Follow instructions: Present answer, Update points, Wait a few seconds and ask if user is ready for next question
10

FIGURE 4

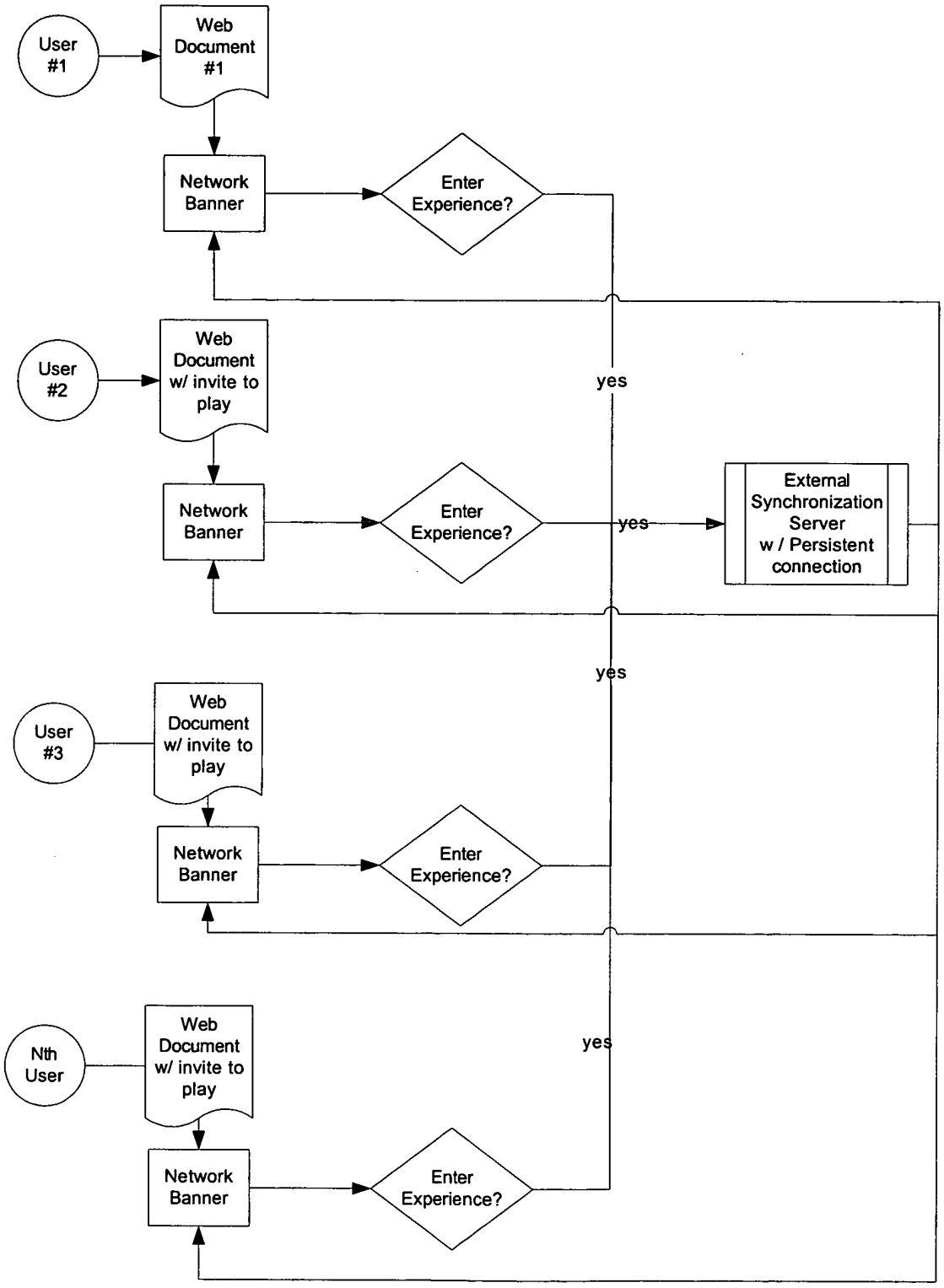

User #1
Web Document #1
Network Banner
Enter Experience?
User #2
Web Document w/ invite to play
Network Banner
Enter Experience?
yes
External Synchronization Server w / Persistent connection
yes
yes
User #3
Web Document w/ invite to play
Network Banner
Enter Experience?
yes
Nth User
Web Document w/ invite to play
Network Banner
Enter Experience?

FIGURE 5

User Experience

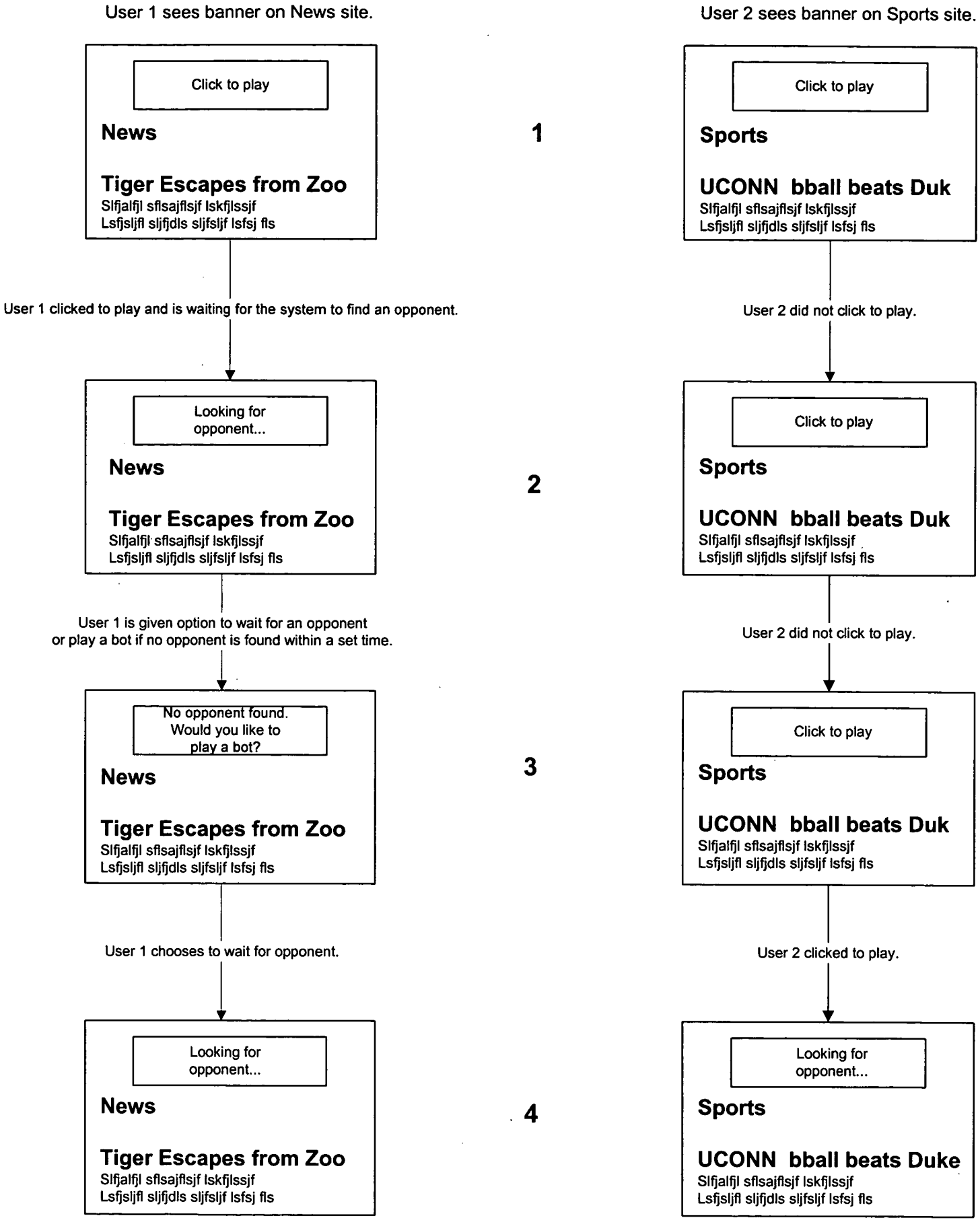
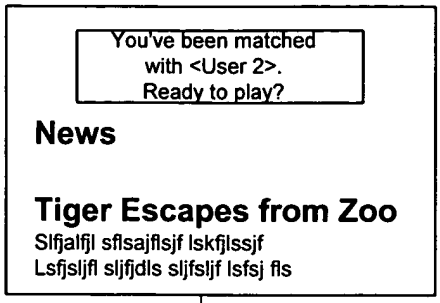


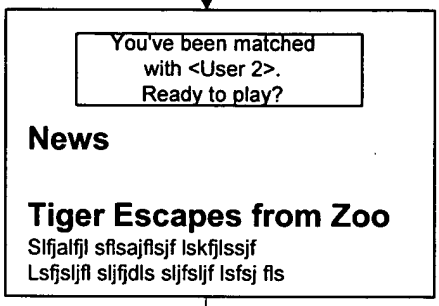
FIGURE 5 cont.

System matches User 1 with User 2.

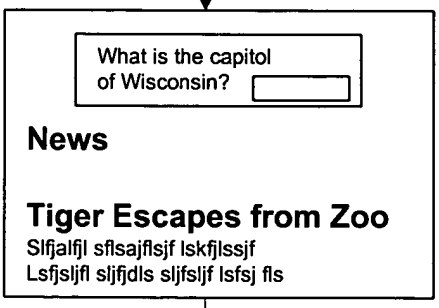
User 1 is notified of match and prompted to start.



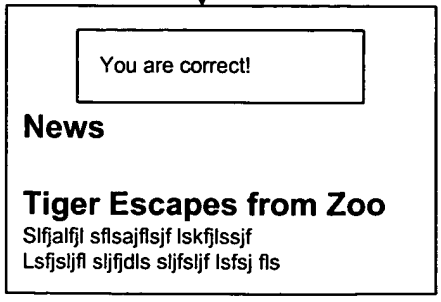
User 1 has not indicated readiness.



User 1 indicated readiness.



User 1 answers question and waits for User 2 to respond.



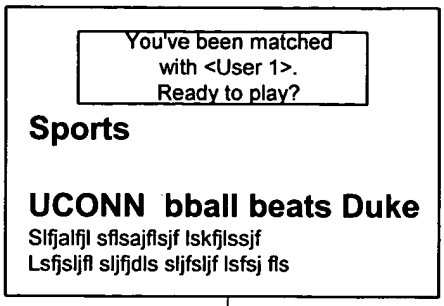
5

6

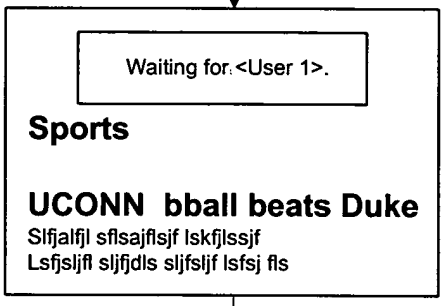
7

8

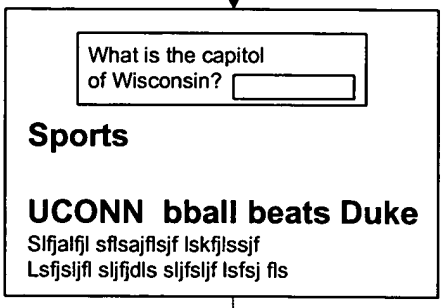
User 2 is notified of match and prompted to start.



User 2 indicated readiness.



User 2 indicated readiness.



User 2 has not answered.

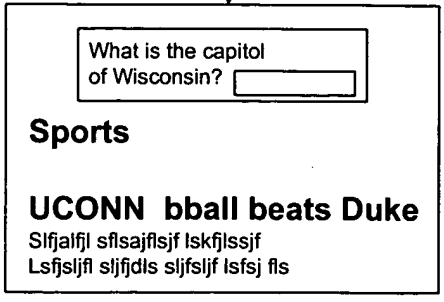
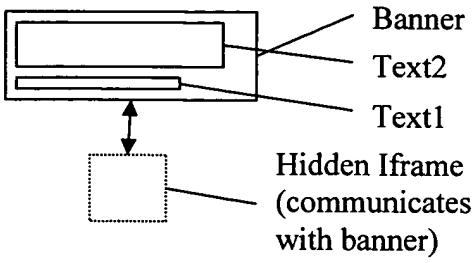
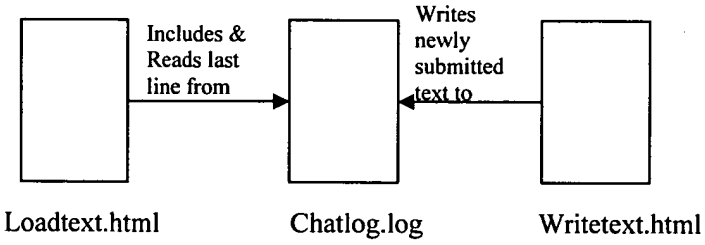


FIGURE 6


Banner
Text2
Text1
Hidden Iframe
(communicates
with banner)


Includes &
Reads last
line from
Writes
newly
submitted
text to
Loadtext.html
Chatlog.log
Writetext.html

5